# **Monoclonal Antibody to Myoglobin**

Cat. #: Mab-606092

# **Description:**

Myoglobin (MB), with 154-amino acid protein (about 17kDa), is a member of the globin superfamily and expression of myoglobin is highest in skeletal and cardiac muscle. Functionally, myoglobin is well accepted as an O2-storage protein in muscle, capable of releasing O2 during periods of hypoxia or anoxia. Myoglobin is also thought to buffer intracellular O2 concentration when muscle activity increases and to facilitate intracellular O2 diffusion by providing a parallel path that augments simple diffusion of dissolved O2. Furthermore, myoglobin is used together with cTnI or cTnT in clinical practise for better specificity in AMI diagnosis.

# Immunogen/Specificity:

Ni-NTA purified truncated recombinant Myoglobin expressed in E. Coli strain BL21 (DE3)

# Applications:

Western Blot: 1: 500- 1: 2,000 IHC(P): 1: 500- 1: 2,000 IHC(F): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration

### test.

#### Reference:

1. George A. Ordway, Daniel J. Garry J. Exp. Biol., Sep 2004; 207: 3441-3446

2. Ulrich Floel, Tim Laussmann, Axel Goecke

Circ. Res., Apr 2005; 96: e68 - e75

Clone Number: 6H8B5,5A2G8,4D7H3,3H6A7

Isotype: IgG1 Species: Human

Storage and Stability: stored at -20 C

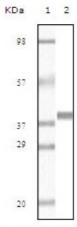
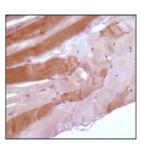
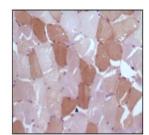


Figure 1: Western blot analysis using anti-Human Myoglobin monoclonal antibody against truncated Myoglobin recombinant protein (GST-Tag).



Human skeletal muscle



Human skeletal muscle

Figure 2: Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue, showing cytoplasmic localization using Myoglobin antibody with DAB staining.